ENERGY AND ENVIRONMENT CABINET
COMMONWEALTH OF KENTUCKY
DEPARTMENT FOR ENERGY DEVELOPMENT & INDEPENDENCE

Department for
Energy Development
and Independence

COAL-TO-LIQUID / COAL-TO-GAS PERMIT MAP

SMG

Smith Management Group
June 2008

1.0 INTRODUCTION

One of the most important aspects in the development of a coal gasification project is the receipt of the required permits in a timely and predictable manner. A successful permitting strategy should include:

- A clear, easily understood, technically correct vision of the proposed project.
- Meeting with state and federal agencies early in the planning process to share the vision of the project, identify the permits required and to develop an understanding of the permitting process, time frames and level of detail required by the regulatory agency.
- A good understanding of the limitations of the physical and environmental conditions of the potential plant site and surrounding area.
- Identify and meet with local and regional leaders.
- Understand the expectations and fears of the local community and develop a plan to address them.
- File timely, accurate and complete permit applications.
- Maintain a consistent interface with the regulatory agencies throughout the permitting process even after the initial applications have been filed.

It is important to identify the permits that will be required for the coal gasification project and to outline the tasks required to obtain those permits. In addition, time frames for the process should be established. These timeframes should be tied into the project design and construction schedule to make sure that the information needed for the permits will be available and that the permit approvals and site construction can proceed on schedule.

This document addresses the basic environmental permits and time frames that could be required for the operation of a gasification project. It does not take into consideration, business and organizational issues which may impact the time frames

described in the report. These issues include project finance, the engineering design of the facility, the contractual and delivery issues inherent in obtaining process equipment and gasification equipment, the construction of roads, rail or other needed infrastructure.

The facility may be located in an area where city water and sewer are either not available or are in need of additional capacity. As such, the developer will be required to arrange for the additional service required by the facility. The requirements for this type of site specific permitting have not been addressed in this document.

A sewer line extension from the facility to the local municipal sewer and wastewater treatment plant may be required. If the developer requests a sewer line extension to transport waste water into the local waste water treatment plant, the local municipality or sewer district must prepare the design plans and have them approved by the Kentucky Division of Water

If a developer decides to treat wastewater on-site, the action will be permitted by the Division of Water's Kentucky Pollution Discharge Elimination System (KPDES) program. The KPDES permitting process is described in detail in Section 2.3.

The actions necessary to obtain adequate potable water and sanitary sewer service is outside the scope of this discussion.

Local county and city zoning ordinances must be evaluated to determine if a zoning variance or a zoning change is needed to construct an industrial coal gasification facility. The process for requesting a zoning change or variance will require additional evaluation beyond this document.

Figure 1 is a Gantt chart, which identifies typical state and federal permits and approvals that may be required for a coal gasification project. Timeframes illustrated

for receiving the required coal gasification permits were developed through interpretation of state and federal regulations and previous industry permitting experiences. Staffing of these programs and workload issues within the reviewing agencies can impact their ability to initiate review or complete their review within the regulatory timeframes. The timeframes reflected on the Gantt chart include both professional experience and the stated regulatory time frames to approve the applications.

Individual Gantt charts have been provided in each permit section. Permit applications, guidance documents and forms are also provided and located behind each permit section. Within the text of each permit discussion, there are hyperlinks that provide electronic access to the permit applications, guidance documents and forms.

Certain activities are not reflected in the Gantt chart. These include plans required to be prepared, implemented and maintained on site but are not submitted to the regulatory agency, unless requested. For example, a Groundwater Protection Plan and a Spill Protection Control and Countermeasures Plan both may be required as part of the facility's compliance effort, but are not submitted to an agency.

Interaction with several local, state, federal governmental entities, and private entities will be required when requesting permits and approvals for a coal gasification facility. These agencies include:

- Kentucky Energy and Environment Cabinet
    - Division of Air Quality,
    - Division of Waste Management,
    - Division of Water,
- Kentucky Siting Board
- Kentucky Public Protection Cabinet

- State Fire Marshall, and
- Kentucky Office of Housing, Buildings and Construction
- Federal Government
    - the Federal Energy Regulatory Commission (FERC),
    - the U.S. Army Corp of Engineers,
- Local Nongovernment Entities
- the local electric utility,
- Independent National Agencies
- Regional Transmission Organization (RTO),

Electrical Power Issues

The developer will need to work with the electric utility that serves the territory to establish the feasibility and engineering studies necessary to initiate the level of service required for the facility. In Kentucky there are four local electric utility companies.

If a developer plans a project using American Electric Power (AEP) or East Kentucky Power Cooperative (EKPC) electrical lines and generates excess electrical power, it will need to work with PJM Interconnection to address the transmission of excess power from the facility. PJM Interconnection is a Regional Transmission Organization (RTO) that coordinates the movement of wholesale electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

If a developer plans a project using E.ON U.S. electrical lines, regardless if the facility will generate excess electricity, it will need to work with South West Power Pool (SWPP) to address the transmission of start-up power and excess generated power. SWPP is an Independent Transmission Organization (ITO) under private contract with KU that is responsible for administering and coordinating the sale of electricity on

their behalf. SWPP is also an RTO, but only coordinates the movement of electricity in the Midwest and Southwest areas of the United States. As a private contractor, SWPP acts like an RTO, but actually only controls E.ON U.S.'s transmission facilities used for the transmission of electric energy in interstate commerce, and provides transmission service to customers.

The Tennessee Valley Authority (TVA) is a federal quasi-corporation that acts like a public power company. TVA supplies power in regions of southern Kentucky but they do not rely on a RTO to monitor the movement of their electricity. If a developer plans a gasification facility in TVA's territory and requests an interconnection to their transmission lines, then TVA will conduct the required RTO studies in-house. The RTO studies discussed below are identical to what is required by TVA.

The Kentucky Siting Board is a seven-member review board within PSC that examines applications for the construction of merchant power plants with a generating capacity of 10 megawatts or more and transmission lines capable of carrying 69kV or more. The facility may generate excess power and may need to construct transmission lines with a capacity which exceeds 69kV.

Division of Air Quality

The Division for Air Quality (DAQ) is a state agency with enforcement powers set up to protect human health and the environment. DAQ regulates air emissions through a permitting system. DAQ will be charged with reviewing and issuing the appropriate air permit for the facility.

Division of Waste Management (DWM)

The Division of Waste Management (DWM) oversees waste issues within the Commonwealth. The facility may be required to interact with two Branches of DWM in its development of the coal gasification plant. The Solid Waste Branch (SWB) is responsible for the review and issuance or denial of permits for solid waste and special waste landfills, land farming and composting facilities and

registrations for permit-by-rule facilities. The facility will likely need to permit a landfill to accept the frit generated by the gasification process, to the extent that material is not sold or otherwise removed for beneficial reuse. The Hazardous Waste Branch (HWB) is responsible for regulating the storage, treatment or disposal of hazardous waste in the Commonwealth. The facility may be required to register as a hazardous waste generator if its operation produces hazardous waste.

Division of Water (DOW)

The Division of Water (DOW) is a state agency setup to manage, protect and enhance the quality and quantity of the commonwealth's water resources through voluntary, regulatory and educational programs. The facility will interact with DOW for permitting of water discharge, waste water treatment, water quality certification and with regard to any coordinated Corps permit regarding wetlands or stream construction.

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (Corps) is the federal agency responsible for regulating construction within navigable waters of the United States and the discharge of dredge or fill material into the waters of the United States, including special aquatic sites such as wetlands. The Corps can authorize activities by a standard individual permit, letter-of-permission, nationwide permit, or regional permit. A gasification facility may have barge capacity or construct a water intake that can impact wetlands. Therefore, a Corps permit may be required for that activity.

Federal Energy Regulatory Agency

The FERC is the independent federal agency that regulates the interstate transmission of electricity, natural gas, and oil. If the facility will build or impact an interstate pipeline or transmission line, there will be interface with the FERC.

2.0 STATE ENVIRONMENTAL PERMITS

Permits issued by Kentucky regulatory agencies will include those impacting air emissions, waste disposal and impact on water resources.

Permits Issued by the Kentucky Division of Waste Management

2.1 Kentucky Hazardous Waste Generator Registration

Division of Waste Management
Hazardous Waste Branch
April Webb, Director
14 Reilly Road
Frankfort, KY 40601
Phone: 502-564-6716

The Commonwealth of Kentucky requires a facility to register for an Environmental Protection Agency (EPA) ID number when generating hazardous waste (401 KAR 32:010 (2005)). One of the coal gasification processes that will require an EPA ID number is the capture and disposal of small quantities of mercury, a listed hazardous waste. The facility will likely use a private contractor to transport the captured mercury off-site for disposal.

To dispose of hazardous waste on-site, the facility will be required to apply for a hazardous waste landfill permit. This permitting process is very extensive and requires complex design work that will need to be approved by the Division of Waste Management. It is not recommended that a facility pursue this method of disposal but instead plan for the off-site disposal of generated hazardous waste.

The timeframes for issuance of a hazardous waste EPA ID number are shown on Figure 1, and Figure 2A details this permitting process as a stand-alone document.

A developer will need to register with the Cabinet by submitting a complete Notification of Hazardous Waste Activity Form (See attached DEP 7037 form or Hazardous Waste Form 7037). The Division of Waste Management (DWM) has made available a Hazardous Waste Generators Handbook that helps work through the application process.

The facility will submit a $300 application fee with Form DEP-7037 form to the DWM. There is no public notice or hearing required. The issuance of the EPA ID number will made within 90 days of the submitted completed application.

The actual volume of captured mercury or other hazardous waste a gasification facility will generate is not known, based on the mercury content of coal, it is most likely a facility will be a small quantity generator at the most. A facility will be classified based on the volume of waste generated as described in the following table.

Hazardous Waste Generators

Conditionally Exempt, Small Quantity	**Small Quantity**	**Large Quantity**
Less than 220 lbs @ month – not acutely hazardous waste	220 to 2200 lbs @ month – not acutely hazardous waste	More than 2200 lbs @ month – may include acutely hazardous
Registration not required, but advisable and free	Registration required	Registration required
Manifest not required	Waste manifest required	Waste manifest required
		Closure of accumulation area required
May accumulate up to 2200 lbs	Ship within 180 days	Ship within 90 days
	Annual Report, Hazardous Waste Assessment and fee	Annual Report, Hazardous Waste Assessment and fee

An annual renewal for both small quantity and large quantity generators must be submitted to the Cabinet on the Notification of Hazardous Waste Activity Form at

least forty-five (45) days before the expiration date shown on the generator's registration (401 KAR 32:010 (2007)).

The facility should be aware that the transporter and ultimate disposal facility or other hazardous waste must also have an EPA identification number. Kentucky follows the federal rules for shipping hazardous wastes to a Treatment Storage Disposal (TSD) facility and requires transporters and disposal facilities to obtain their own EPA ID number. If a TSD facility is not registered with an EPA ID number the developer may be held responsible. The TSD facility must also be properly permitted and operate in compliance under the laws and regulations.

2.2 Kentucky Special Waste Permit

Division of Waste Management Solid Waste Branch
Ron Gruzesky, Director
14 Reilly Road
Frankfort, KY 40601
Phone: 502-564-6716

The Commonwealth of Kentucky requires a facility who establishes, constructs, operates, maintains or permits the use of a waste site or facility to obtain a permit, pursuant to administrative regulations adopted by the Cabinet (Ky. Rev. Stat. §224.40-305 (2006)). The 2008 session of the Kentucky Legislature passed SB 243, which classified coal gasification waste as special waste. A special waste landfill permit will be required to dispose of the coal combustion by-product, other than by beneficial reuse.

The timeframes for issuance of a special waste permit are shown on Figure 1, and Figure 2B details this permitting process as a stand-alone document and is located behind this section.

Special Waste Regulations are found in Chapter 45 of Title 401 of the Kentucky Administrative Regulations. The special waste application is a single phased submittal of the fee and form. Upon receipt of the application, the Solid Waste Branch must determine if the application is complete and the reviewer is given 45 days to make that assessment. If the application is found to be incomplete, the applicant is given a 30 day period to remedy any deficiencies. The reviewer then has an additional 30 days to assess the new submittal. Once the application is complete, DWM has 180 fays to approve or deny the application (401 KAR 45:025 (1993)). Tolling of the mandatory approval or denial time will occur when an application is returned to the applicant to remedy any deficiencies. The applicant is allowed a total of 180 days to respond to notices of deficiency following the acceptance of the application as administratively complete. Additionally, the

Cabinet is allowed 60 days to consider public comment arising from a public hearing, in addition to its review schedule.

As of May 2008, the application fee for a special waste permit is $5,000 (401 KAR 45:250 (1992)); and the developer can expect to pay approximately $200,000 - $400,000 in consulting fees for preparation of the application. The application fee must be accompanied by the facility's DEP 7094A form and attachments (See attached Kentucky Special Waste Permit Application or Special Waste Landfill Permit Form), which together make up the special waste landfill permit application. The information required in the application is comprehensive and includes both engineering and design of the landfill as well as detailed information about the impact of the proposed landfill on the property and surrounding community. Engineering drawings, specifications and studies must be certified by a professional engineer registered in Kentucky. The preparation of the application will include substantial geotechnical exploration and design and can be expected to consume 3 to 6 months prior to submittal.

Public notice, in the form supplied by the Cabinet, will be published in a daily or weekly major local newspaper of general circulation where the proposed site or facility is located, following a determination by the Cabinet that the application is complete (401 KAR 45:050 (1992)). Verification of publication must be provided to the Cabinet within thirty (30) calendar days of the publication date (401 KAR 45:050 (1992)).

After public notice is complete, a thirty (30) day public comment period commences during which any interested person may submit written comments on the application or permit decision, and may request a public hearing if a hearing has not already been scheduled. (401 KAR 45:050 (1992)). The comment period begins on the date of publication of the public notice.

The Cabinet may hold a public hearing on the basis of written request or when a significant degree of public interest exists concerning a special waste site or facility permit decision (401 KAR 45:050 (1992)).

When the final permit decision is issued, the Cabinet will issue a response to comments. This response will specify which provisions of the draft permit have been changed in the final permit decision, and the reasons for the change; and briefly describe and respond to all significant comments on the draft permit raised during the public comment period, or during any public hearing (401 KAR 45:050 (1992)).

A landfill permit has a five (5) year life and must be renewed by submitted Form 7095 at least 180 days prior to the expiration of the issued permit. (401 KAR 45:030 (1992))

In addition to having a permitted special waste landfill, the facility must also have a certified landfill operator (401 KAR 47:070, Section2). Training classes are provided by the Cabinet and an examination is held on the last day of training to test to applicant's knowledge.

Permits Issued by Kentucky Division of Water

2.3 General Stormwater Permit and KPDES Permit

Division of Water
Kentucky Pollutant Discharge Elimination System
14 Reilly Road
Frankfort, KY 40601
Phone: 502-564-3410 ext 477

A General Stormwater permit covers all new and existing stormwater discharges associated with construction activity (KRS §224.16-050 (2003). Any construction activity that disturbs one (1) acre or more is covered under this permit (401 KAR 5:055, Section 1 (1994)). The construction of a coal gasification facility at any site will have an affect on more than one acre and will require a General Stormwater permit.

The Kentucky Pollutant Discharge Elimination System (KPDES) regulations require a permit for the discharge of pollutants from any point source into waters of the Commonwealth. After start-up, a coal gasification facility will most likely discharge conventional pollutants into a tributary of water of the commonwealth. The application for a new discharge must be received by the DOW at least one hundred and eighty (180) days before the proposed discharge is due to commence (401 KAR 5:060 (2002)).

The timeframes for issuance of a general stormwater permit are shown on Figure 1,and Figure 3A details this permitting process as a stand-alone document and is located behind this section.

The facility may prefer the completion and submittal of the General Stormwater permit to be conducted by the private contractor who will perform the construction activities of the gasification facility. This would make the contractor responsible for the stormwater and runoff control during construction.

The timeframes for issuance of a KPDES permit are shown on Figure 1, and Figure 3B details this permitting process as a stand-alone document and is located behind this section.

Stormwater Permit

To be included in a general stormwater permit, the developer or its contractor must submit a signed copy of a Notice of Intent (NOI) form to the KY DOW, KPDES Branch, in Frankfort, Kentucky at least 48 hours before construction activity begins (401 KAR 5:055, Section 1 (1994)) (See attached Notice of Intent form or NOI).

Unless the applicant is notified by the Director of DOW to the contrary, it is authorized to discharge stormwater associated with construction activity under the terms and conditions associated with this permit. Discharge may begin 48 hours after the Notice of Intent is postmarked (401 KAR 5:055, Section 1 (1994)).

A General Stormwater permit is valid for five (5) years (401 KAR 5:070, Section 1 (1994)) however, once construction is completed and cover is established, the permittee is required to file a notice of termination. Once the individual KPDES permit is issued and, pursuant to Form F, covers stormwater discharge, the general permit is automatically revoked.

A Best Management Practice (BMP) plan must be developed before submittal of the NOI and implemented beginning with the initiation of construction activities. The BMP plan must identify potential sources of pollution that may reasonably be expected to affect the quality of the stormwater discharges from the site. The BMP plan must describe and ensure the implementation of practices that are to be used to reduce the pollutants in storm water discharges.

NOTE: Kentucky's General Stormwater permits for construction activity expired on Sept. 30, 2007. As of June 2008, if a construction project is planned, the developer must submit the (NOI) as previously required. The Division of Water is currently drafting and reviewing the new requirements for these facilities. Additional information pertaining to the permit status will be provided by the Division of Water as soon as it is available. It is unclear what the status of a facility is following the submittal of the NOI during the period when Kentucky does not have a valid General Stormwater permit. An option for the developer is to submit an application for an Individual Stormwater Permit. The process may be more detailed and have a slightly longer startup time but the permittee would be in a better position today to defend the permit from a third party challenge.

KPDES Permit

The KPDES permit application for a gasification facility will be comprised of three distinct forms (All applications and instructions discussed are attached). General instructions are found at KPDES General Instructions. All KPDES applications must include KPDES Form 1 (401 KAR 5:060 (2002)). This is a general form that requests information regarding facility location, owner/operator addresses, existing environmental permits, etc. Instructions are found at Form 1 Instructions.

In addition to Form 1, the facility must fill out a specialized form that relates directly to the type of operation. A coal gasification facility will require Form C – Process Water Associated with Manufacturing Establishments and Mining Operations to be completed and submitted along with Form 1 (401 KAR 5:060 (2002)). (See KPDES Form C). Form C must be completed by operators of facilities that discharge water associated with the manufacturing activity.

A coal gasification facility will also require Form F – Stormwater Associated With Industrial Activity, to be completed and submitted along with Form 1 and Form C (401 KAR 5:060 (2002)) (See Form F).

Permit fees are based on the facility classification and the design flow rate. The fee will be a maximum of $3,200, although only 20% of the fee will be required at the time of submitting the application. The balance must be paid before the permit is issued.

Information required for the individual KPDES permit is substantial and includes an analysis of the water balance of the process and discussion of all water and waste streams that will be included in the discharge.

The DOW will not begin the technical review process until the application is deemed administratively complete. An application submitted for a KPDES new source will be reviewed for completeness by the KPDES Branch within 30 days of receipt (401 KAR 5:300 (2007)). Upon completing the review, the Division will notify the applicant or facility in writing if the application is considered administratively complete. If the application is determined to be incomplete, a list of missing informational topics will be provided to the applicant. If deficiencies in an application are not corrected, the permit can be denied and appropriate enforcement actions can be taken under KRS Chapter 224.

The Cabinet may request additional information to aid in its decision regarding the application even after notifying the developer that the application is complete.

A 30 day public notice period is required after the application is deemed technically complete. A public hearing may be held no sooner than 30 days after the public notice (401 KAR 5:075 (2002)). In the event that a public hearing is requested or significant comments are received, the developer should consider that addressing comments may slow the review process and may extend the approval of the KPDES permit.

NOTE: The DOW is in the process of revising regulations pertaining to Water Quality Standards now found in 401 KAR Chapter 5 to a new section of 401 KAR Chapter 10. Revisions to these regulations may impact the permit requirements for KPDES discharges. The scheduled public hearing for the revised regulations is July 23, 2008.

2.4 Floodplain Construction Permit and Water Quality Certification

Division of Water
Water Resources Branch
Floodplain Management Section/Water Quality Certification
14 Reilly Road
Frankfort, KY 40601
Phone: 502-564-3410

The DOW Floodplain Management Section of the Water Resources Branch has the primary responsibility for the approval or denial of proposed construction and other activities within the 100-year floodplain of all streams in the Commonwealth (KRS §151.230 (2000) and 401 KAR 4:010 - 060). In addition, activities which result in physical disturbances to wetlands or streams may also require a Water Quality Certification Permit. This Certification is needed when activity results in the physical disturbance to wetlands or streams. A coal gasification facility will most likely require the construction of a water withdrawal intake structure, which meets these criteria. The application for a Floodplain Construction Permit and a Water Quality Certification is attached (See attached permit or Water Quality Cert.).

A floodplain construction permit and water quality certification are on the same application. Two copies are submitted to DOW. One copy will be reviewed by the Water Resource Branch, Floodplain Management Section and one copy will be reviewed by Water Quality Branch.

The application must include a location map, plans of the proposed construction and details on how the public notice(s) will be addressed. According to the DOW, if there is existing flood data on the proposed site (i.e., National Flood Insurance Program flood maps, Corps of Engineers flood studies or previous permit data), the permit review may begin. If there is no existing data, survey information must be submitted in order to perform an in-house flood study of the area.

All plans submitted must include the following information regarding the proposed project: Name of the project, date, scale of maps, name of stream, direction of flow, purpose and intended use, scheduling of activities, and location. Photographs of the proposed construction site looking both upstream and downstream at each cross-section and other points of interest are generally useful and may be required. Elevations must be shown with respect to mean sea level, and a north arrow must be provided.

For docks or water intakes, a properly completed Stream Construction Permit Application Data Sheet, a location map (preferably USGS), the elevation of docks, top of structure, extreme high water, and normal pool, and the distance that the structure will project into stream will need to be provided.

An analysis of each of the two review processes is provided below.

Floodplain Construction

The Floodplain Management Section will notify the applicant, in writing, within 20 working days from the date of receipt of the completed application whether the permit will be approved, denied or if modifications to the application will be required (KRS §151.260 (1966). If deficiencies are noted in the application, the section will notify the applicant.

The timeframes for issuance of a Floodplain Construction permit are shown on Figure 1, and Figure 3C details this permitting process as a stand-alone document.

401 KAR 4:050 Section 3 requires public notice be sent to individuals who may be directly impacted by the project and published if the impact may extend beyond the immediate area. For projects with limited effects, the applicant can

submit affidavits from all potentially impacted parties indicating their acknowledgement of receipt of notice (401 KAR 4:060, Section 3).

If the reviewer determines the project meets regulatory requirements, all deficiencies have been corrected and all necessary modifications to the drawings have been made, a draft permit is written to be reviewed by the supervisor and branch manager. If they concur that the proposal meets all state floodplain laws, regulations and standards, the permit is prepared and signed. Appropriate requirements and limitations are listed on the permit.

The permit is issued for the period of one year during which the construction must begin. If construction begins within that one-year period, the permit is valid until project completion. The developer may request an extension if work will not begin with a year of the permit date. Within ninety (90) days of the completion of the construction, the developer must notify the Cabinet and terminate the permit.

Water Quality Certification

The facility will be required to request a 401 Water Quality Certification if construction work involves bank stabilization, dredging or relocation, or the potential for wetlands disturbance. This may be the case if either a water intake is constructed or a wetland area is impacted.

The timeframes for issuance of a Water Quality Certification are shown on Figure 1, and Figure 3C details this permitting process as a stand-alone document.

The process for obtaining a permit begins with the submittal of a completed application, which is described above. The web link for the instructions for the application is Water Quality Certification Instructions.

DOW has filed emergency regulations regarding 401 KAR 9:010. Water Quality Certification Applications are now subject to a separate notice from the floodplain

construction notice described previously. Notice is given by the DOW through its website, by email and by mail. The public comment period extends for 30 days from the date of the public notice.

2.5 Water Withdrawal Permit

Division of Water
Water Withdrawal Permitting
14 Reilly Road
Frankfort, KY 40601
Phone: 502-564-3410

The water withdrawal program administered by the DOW governs all withdrawals of water greater than 10,000 gallons per day from any surface, spring or groundwater source, with a few exceptions of water required for domestic and industrial purposes (KRS §151.140-150 and 401 KAR 4:010). A permit may also be required if the withdrawal is sporadic but represents a significant portion of the available water supply. (401 KAR 4:010, Section 1)

A withdrawal for a gasification facility will not fall under one of the exceptions and the developer will be required to apply for a water withdrawal permit. A 10,000 BPD CTL facility will require approximately 2,224 gpm and an equivalent CTG facility will require approximately 2,639 gpm, which is 3.2 to 3.8 MGD.

An application for a standard permit should be made three to six months prior to the desired start-up date. Standard permits require monthly reporting of actual daily withdrawals amounts.

The timeframes for issuance of a Water Withdrawal Permit are shown on Figure 1, and Figure 3D details this permitting process as a stand-alone document.

A complete application for a gasification facility requiring a water withdrawal permit can be found in the attached material (See attached water withdrawal permit or Standard Withdrawal Application).

The withdrawal permit will have an effective date which may be as much as three years after the date of issue. The water required by the applicant is then reserved for its later use provided the amount of water continues to be available,

additional water is available for other uses and the applicant provides quarterly status reports of the progress of the project. Withdrawals must begin within 6 months following the effective date.

2.6 Groundwater Protection Plan

Division of Water
Patricia Keefe
14 Reilly Road
Frankfort, KY 40601
Phone: 502-564-3410

According to 401 KAR 5:037, Section 2, a Groundwater Protection Plan (GPP) must be prepared and implemented if a facility is storing, treating, disposing, or related handling of hazardous waste, solid waste, or special waste in landfills, incinerators, surface impoundments, tanks, drums or other containers, or in piles. Several other sections of the regulation related to the transfer and storage of products would require a groundwater protection plan as well.

If the gasifier waste is to be stored in a permitted landfill on site, then the special waste landfill permit will satisfy the regulatory groundwater protection requirements for the landfill area.

However, it is likely that the operational aspects of a gasification facility will require that a groundwater protection plan be implemented. A site specific groundwater protection plan must be utilized. (*Generic Groundwater Protection Plans are available for certain types of activities but these are plans that have previously been approved by the Cabinet and can be applied to activities conducted at different locations. At the time of this report, no generic groundwater plan has been approved by the Cabinet which would be applicable to a coal gasification facility.*) Public notice of a site specific plan is not required, however, the facility must make the plan available for review upon request by providing a copy to be viewed at the facility, the DOW or a regional office or at a local public library. (401 KAR 5:037 (1994)).

The GPP is not submitted to the Cabinet for review unless requested. Following review, if the DOW determines the plan does not adequately meet the requirements of the regulation, the facility will have 30 days to respond to a Notice of Deficiency.

The GPP must have sections A – G and are required to use the same headings and subheadings described in the attached guidance "Preparing a Groundwater Protection Plan" (Revised September 2006) available at the following web link: Groundwater Protection Plan Guidance Plan.

The required information for the GPP can also be found in the attached guidance document. Some of the more important requirements follow:

- All the activities that are conducted at the facility that require a groundwater protection plan must be described. The developer will likely list above ground or underground storage tanks if a CTL or CTL facility is constructed.
- Inspections must be conducted to insure that the practices selected to prevent groundwater pollution are being used and are properly functioning.
- A description of how the Best Management Plan or practices will protect groundwater (cannot reference SPCC or KPDES Storm water Plans) should be included.
- Information about secondary containment for ASTs must include the type of material (metal, concrete, asphalt, compacted clay or dirt) used to construct the floor and berms (sides) of the containment area.
- The frequency and description of required inspections (daily, monthly, quarterly, etc.) must be described.
- An Inspection Checklist showing what is inspected, the date, observations, actions taken, if any, should be included.

2.7 Spill Prevention Control and Countermeasures Plan

Division of Waste Management
Used Oil – Spill Prevention Control and Countermeasures
14 Reilly Road
Frankfort, KY 40601
Phone: 502-564-6716

A Spill Prevention, Control and Countermeasures (SPCC) Plan is required under the Clean Water Act for "facilities that store, transport or handle oil and could reasonably be expected to discharge oil in harmful quantities to navigable waters." Specifically, an SPCC Plan is required if the facility stores more than 42,000 gallons of petroleum product in underground tanks, or 1,320 gallons of petroleum product in containers of 55 gallons or larger. A professional engineer must certify the plan (40 C.F.R. §112.3 (2002)). A CTL facility will likely store “oil” in excess of these quantities.

For purposes of this regulation, "oil" means oil of any kind or in any form, including, but not limited to petroleum, fuel oil, sludge, oil refuse and oil mixed with waste other than dredged spoil. SPCC Plans must be updated every five years or within 6-months of a change in design, construction, operation or maintenance, and are kept on file at the facility (40 C.F.R §112.5 (2005)). An SPCC Plan has the following six required elements (40 C.F.R. §112.7 (2004)):

- A written description of any spills and corrective actions within the previous 12 months, and plans for prevention of future spills;
- Predictions of direction, flow rate, and quantity of discharge for each major type of failure where reasonable potential for equipment failure exists;
- Details of appropriate containment or diversionary structures used to prevent oil from reaching navigable waters;
- If installation of containment or diversionary structures is not practicable, a strong contingency plan and a written commitment to the expeditious control of oil discharges is required;

- Documentation that the facility design, construction, operation, and maintenance conforms with the requirements of 40 CFR 112.7 (e); and
- Certification by a professional engineer (PE) and appropriate management approvals.

Permits Issued by Kentucky Division for Air Quality

Division for Air Quality
Permit Review Branch
803 Schenkel Lane
Frankfort, KY 40601
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Introduction

The Division for Air Quality (DAQ) is charged with regulating the emissions from industrial facilities through their permitting program.

The permitting process should begin with a scoping meeting between the developer and the DAQ as early in the design process as possible. Certain design decisions can impact the type of air permit and the length of time necessary for approval. Because construction on the proposed site can not begin until the air permit is issued from the DAQ, it is important for the developer to have a well defined permitting strategy with the Division. The owner or the owner's representatives should be well prepared for the initial meeting. While still in a preliminary stage, a thorough understanding of the process and potential emissions is very important to insure a productive initial meeting.

All stationary sources emitting certain amounts of air pollutants above a minimum threshold found in 401 KAR 52:070 are required to obtain a construction/operating permit. The definition of "air contaminant or air pollutant" includes a broad range of substances. You will need to consult Kentucky's air quality regulations (401 KAR Chapter 52- Permits, Registrations, and Prohibitory Rules) to determine which "family" of air pollutants may apply to your facility.

Generally the first step in the permitting process is for the owner of the facility to determine the amount of air pollutants the source will emit and if/how those emissions are regulated. The emission determination is made based on calculating potential emissions over a 24 hour, 7day, 52 week period. The

amount of emissions will place the facility into a regulatory category. For example a “major source” includes those stationary sources that emit 100 tons or more per year of a regulated air pollutant. You can also be classified as a major source if your potential emissions exceed 10 tons per year of an individual hazardous air pollutant (HAP) or 25 tons per year of combined HAPs. Depending on your emissions, you could be classified as a major source in one category (priority pollutants) and a minor source in another (HAPs).

There are other categories of air permits in Kentucky for facilities that emit less than the major source threshold. These are generally classified as Non-Major Source and include State-Origin, Conditional Major and Synthetic Minor permits. These permits are discussed in more detail below in Sections 2.8 State Origin Air Permit, 2.9 Conditional Major, 2.10 Synthetic Minor and 2.11 Title V Air Permit.

The Cabinet has provided a Fact Sheet which helps the applicant analyze the type of permit that best meets its needs. See “Kentucky's Permitting/Registration Thresholds”.

A coal gasification facility will require, at a minimum, a state origin air permit and may require a Title V air permit. The amount of emissions from the start-up boiler process and from material handling areas will likely determine which category of air permit is required.

If a company is considering putting a gasification process on a mine site, it is important to know that the gasification operation will typically not be able to modify the air permit for the coal mining and processing operations. The gasification facility will likely need to apply for an air permit independent of the coal operation. Requesting an amendment to the current air permit is not likely due to the fact that the gasification industry is different than the coal mining industry, with a separate standard industrial classification (SIC) code.

An applicant should be aware that the DAQ can require an evaluation of potentially hazardous matter and toxic substances as well as an evaluation of the adequacy of controls and procedures and potential emissions on an individual basis for any category of facility (401KAR63:020).

2.8 State Origin Air Permit

A state origin air permit will be required if the facility has the potential to emit less than 10 tons per year of a single hazardous air pollutant, less than 25 tons per year of combined hazardous air pollutants; and greater than or equal to 25 tons per year but less than 100 tons per year of a non-hazardous regulated air pollutants (401 KAR 52:040, Section 1 (2007)). The DAQ guidance and permit forms may be accessed through the DAQ website at www.air.ky.gov. (See State Origin Air Permit Guidance and DAQ Application Forms 7007).

A State Origin Permit will include, at a minimum, Forms DEP 7007AI, administrative information, DEP 7007B, manufacturing or processing operations, DEP 7007N, emissions, stacks and controls and DEP 7007V, applicable requirements and compliance activities.

Included below is a brief description of some of the information that must be submitted in the application.

- Description of the source's processes and products;
- Identification and description of all emission units in sufficient detail to establish the basis for applicable requirements;
- Emission rates in terms necessary to determine compliance with applicable requirements;
- Fuels, fuel use, raw materials, production rates, and operating schedules to the extent needed to determine emissions;
- Calculations of potential emissions
- Information needed to determine the applicable requirements and emission fees and to define the permit terms and conditions for each alternate operating scenario;
- A compliance plan containing:
    - The compliance status for all applicable requirements
    - A compliance schedule
- A statement of methods to be used for determining compliance, including a description of monitoring, recordkeeping and reporting requirements, and test methods;

- A statement including the source's compliance status with applicable monitoring requirements.

The timeframes for issuance of a state origin air permit are shown on Figure 1, and Figure 4A details this permitting process as a stand-alone document.

Regulation 401 KAR 52:040 provides detail as to the information required to be submitted. Note that the regulation requires that an application is submitted in triplicate (401 KAR 52:040, Section 4 (2007)). The Cabinet is required to complete its completeness review within 60 days or the application is automatically deemed to be complete (401 KAR 52:040, Section 9 (2007)). The applicant will receive notice of completeness or a Notice of Deficiency within that period. Once the application is declared complete, the Cabinet then has a 60 day review period during which the permit must be issued or denied (401 KAR 52:040, Section 12 (2007)). As with all permit actions, the mandatory review clock is stopped by a reviewer's request for additional information, clarification or by a notice of deficiency.

Once issued, the permit is valid for 10 years and a renewal application MUST be submitted at least 180 days prior to the expiration of the existing permit (401 KAR 52:040, Section 15). The permitted action must begin within 18 months of the issuance of the permit. The permit may be revoked if the project does not begin, or begins and is discontinued for a period of 18 months or is not completed in a reasonable amount of time. The Cabinet may extend these time frames if the source shows good cause (401 KAR 52:040, Section 12).

A state origin air permit does not require public notice for issuance. Pursuant to 401 KAR 52:100, Section 1, the public notice and EPA review regulation only applies to federally-enforceable and Title V air permits. However, as described in section 2.12 of this report, the EPA could request to review a state origin air permit but this seldom occurs.

2.9 Conditional Major

A coal gasification facility has the potential to easily become a major source. However, the facility could accept limitations on their emissions to avoid major source status (Conditional Major). A Title V major source has the potential to emit 100 tons a year of a regulated air pollutant, or 10 tons a year of a hazardous air pollutant or 25 tons/year of combined hazardous air pollutants (401 KAR 52:001 (2001)). For DAQ Procedures see Federally-Enforceable Permits for Non-Major Sources. This document has been incorporated by reference into the regulations.

The timeframes for issuance of a conditional major air permit are shown on Figure 4B, which details this permitting process as a stand-alone document and is located behind this section.

A conditional major application will be submitted to the Cabinet and unless the Cabinet provides written notice of deficiencies within 60 days, the application will be deemed complete (Cabinet Provisions and Procedures and 401 KAR 52:030, Section 9). The Cabinet will then issue a draft permit within 60 days (Cabinet Provisions and Procedures) after the application is deemed complete and issue public notice that will last for 30 days (401 KAR 52:100, Section 2 (2007)). If public comments can be addressed after the comment period without substantial changes to the application and no public hearing is needed, the Cabinet will issue the final permit within 45 days after the EPA review period (401 KAR 52:100, Section 10 (2007)). If there are substantial changes following the public comment period, the cabinet will make the appropriate revisions and submit the application to the EPA for another 45 days review (401 KAR 52:100, Section 10).

A new source that is conditional major will be allowed to construct and operate in compliance with the draft permit until the final permit is issued or denied.

2.10 Synthetic Minor

Kentucky provides an opportunity to avoid PSD major source permitting by establishing an enforceable emission limit that would ensure that the source's emissions are below the Title I PSD major source threshold. To achieve this "synthetic minor" source status, the facility must:

1) Compare their actual emissions to major source thresholds;

2) Determine which sources need to have their operations limited and by what amount;

3) Obtain any appropriate forms from the permitting authority; and

4) Perform follow-up recordkeeping to assure compliance with the federally-enforceable limit.

The permitting authority, in turn, will create a set of terms and conditions by which the installation must abide. (See guidance found at Federally-Enforceable Permits for Non-Major Sources.)

The timeframes for issuance of a synthetic minor air permit are shown on Figure 4C, which details this permitting process as a stand-alone document and is located behind this section.

The following list provides the pros and cons of the synthetic minor source strategy:

Pros:

- Less extensive than PSD major source permitting;
- Reduced regulatory scrutiny.

Cons:

- Limits increases in emissions to levels below the major source ceiling.
- Requires recordkeeping to demonstrate that the installation remains a non-PSD major source.

- Future growth may result in having to apply for Title V or PSD major source permit.
- Increased lead-time will be required to evaluate and address potential consequences of future changes in operation.

The permit review process for a synthetic minor is similar to a conditional major. The Cabinet will provide written notice to the developer within 60 days after the application is submitted that the application is complete if there are no deficiencies (Cabinet Provisions and Procedures and 401 KAR 52:030, Section 9). The Cabinet will then issue a draft permit 60 days after the application is deemed complete and provide a public notice period of 30 days (401 KAR 52:100, Section 2 (2007)). The EPA will receive a copy of the public notice from the Cabinet and, if needed, a copy of the draft permit. If no substantial changes are made in the permit as a result of comments, either from the public or the EPA, the Cabinet will issue a final permit within 45 days after the EPA review period (401 KAR 52:100, Section 10 (2007)). If there are substantial changes following the public comment period, the cabinet will make the appropriate revisions and submit the application to the EPA for another 45 days review (401 KAR 52:100, Section 10 (2007)).

If the facility files a synthetic minor application, construction can only begin after the final permit is issued.

2.11 Title V Air Permit

The developer may decide it cannot operate at emission levels of a conditional major or synthetic minor source and accept major source status, which requires a Title V operating permit. (See guidance found at Procedures for Issuing Title V Air Permits.)

The timeframes for issuance of a Title V air permit are shown on Figure 4D, which details this permitting process as a stand-alone document and is located behind this section.

The following list provides the pros and cons of obtaining a Title V permit:

Pros:

- One compact permit that specifies all requirements and units clearly.
- No need to limit operations to stay below the Title V major source ceiling.

Cons:

- Recordkeeping requirements for all units at the installation.
- Increased responsibilities for reporting and managing any change to the installation, units, or operations.
- Potentially expensive monitoring requirements.
- Rigorous agency and public review of the application and draft permit.
- Increased reporting responsibilities.
- Criminal penalties for non-compliance.

A Title V air permit will be required if the facility has the potential to emit more than or equal to 10 tons per year of a single hazardous air pollutant, more than or equal to 25 tons per year of combined hazardous air pollutants; and greater than or equal to 100 tons per year of a non-hazardous regulated air pollutant (401 KAR 52:020).

The developer must complete the air application in form DEP 7007 (Obtain forms at Title V) and submit it to the Kentucky Division for Air Quality in Frankfort, KY.

Permits issued to construct a gasification facility will become invalid if the permitted action is not commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or more or is not completed within eighteen (18) months of the scheduled completion date (401 KAR 52:020, Section 3 (2007)).

However the DAQ recognizes that complex construction projects like a gasification project may be a phased project which will subject it to the following rules (401 KAR 52:020, Section 3 (2007)):

- each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates,
- the time period between construction of approved phases will not count in determining that construction has been discontinued for eighteen (18) months or longer, and
- the cabinet may extend the time periods if the source shows good cause.

A Title V permit will require all the information needed to determine the applicable requirements and emission fees. The Cabinet will compute the emissions fee subject to 401 KAR 50:038 (2007).

Important aspects of the application (401 KAR 52:020) include the following:

- PSD requirements such as the modeling of emissions from the facility will need to be conducted and a Best Available Control Technology (BACT) assessment will be required.
- Identification of the applicable requirements for each emissions unit; and identification and description of all emission units and emission points in

sufficient detail to establish the basis for applicable requirements and emission fees.

- Identification and description of air pollution control equipment and compliance monitoring devices or activities. Emission rates in tons per year and in terms necessary to establish compliance consistent with the applicable standard reference test method; fuels, fuel use, raw materials, production rates, operating schedules to the extent needed to determine or limit emissions. Other required information including stack height limitations developed pursuant to 401 KAR 50:042; calculations; citation and description of all applicable requirements, and the applicable test method for determining compliance with each.
- An explanation of proposed exemptions to otherwise applicable requirements; information needed to determine the applicable requirements and emission fees, and to define the permit terms and conditions for each alternate operating scenario; and emissions trading under federally-enforceable emissions caps containing proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable.
- A compliance schedule including remedial measures, checkpoints and scheduled completion dates.
- A statement of methods used for determining compliance, including a description of monitoring, recordkeeping and reporting requirements, and test methods.

For a Title V air permit construction may begin after the Cabinet issues a proposed permit. Once the application is filed with the Cabinet, the Cabinet will provide written notice within 60 days (401 KAR 52:020, Section 9 (2007)), after the application is submitted, to the facility that the application is complete if there are no deficiencies. The Cabinet will then issue a draft permit 60 days (401 KAR 52:020, Section 9 (2007)) after the application is deemed complete and run a public notice for 30 days (401 KAR 52:100, Section 2 (2007)). The facility should

request the DAQ to concurrently run a public notice for the draft permit and public hearing. If the developer does not request the concurrent public notice, then the permitting process may extend an additional 30 days. If there are no public comments to take into consideration, the Cabinet will issue a proposed permit. The Cabinet will then submit the proposed permit to the EPA. If no substantial changes are made in the permit as a result of comments, either from the public or the EPA, the EPA will agree that the permit should be issued within 45 days. The Cabinet will then issue a final permit likely within 10 days or receipt of EPA approval but has up to 60 days (401 KAR 52:020, Section 9 (2007)).

2.12 EPA Review for Air Permits

United States Environmental Protection Agency
Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-8960

A common misconception is that when the state air permitting authority completes its review that the permitting process is complete. EPA's review process of state permits is outlined below and should be taken into consideration during the planning process.

State origin air permits, because of their lack of complexity and low emission levels, are seldom reviewed by the EPA after the Cabinet issues their permit.

For permit actions that require EPA review, the Cabinet will not issue a final permit until the EPA has had an opportunity to review and comment on the permit action and has not objected to issuance of the permit. 401 KAR 52:100, Section 10 provides the regulations governing EPA review that are summarized below.

The EPA review process for permits that trigger mandatory review and permits that may be voluntarily reviewed by the EPA will likely follow the same review process which is described below.

The Cabinet will provide a statement to EPA that describes the legal and factual basis for the draft permit conditions, including references to applicable statutory or regulatory provisions. DAQ will also send the statement to any other person who requests it.

The Cabinet will provide EPA with copies of the permit, permit application and any other appropriate related information such as public comments.

Occasionally and with prior EPA approval, the Cabinet may submit a summary form and the relevant portion of the permit application and compliance plan in lieu of the complete application and compliance plan.

On a case-by-case basis and with prior EPA approval, the Cabinet may submit the draft permit instead of a proposed permit. The Cabinet will provide the permit application, draft permit or permit revision, and supporting information no later than the first day of the public comment period, and all timely submitted public comments after the close of the comment period.

The draft permit will become the final permit or permit revision at the end of the EPA's forty-five (45) day review in the case of a Title V permit, unless a substantial change is made in the permit or permit revision following the public comment period or the EPA files an objection to the permit or permit revision, in which case the appropriate revisions will be made and resubmitted for an additional 45 day review.

If the EPA objects to the issuance of a permit or permit revision, the EPA will file a statement of objection and supporting information within its forty-five (45) day review period. The statement will include the reasons for the objection and a description of the permit changes needed to resolve the objection and provide the permit applicant with a copy of the filed objection. After an objection is filed, the cabinet will make the appropriate revisions and submit a new proposed permit or permit revision to the EPA within ninety (90) days after the objection is filed. If the cabinet does not submit a revised proposed permit or permit revision within ninety (90) days after an objection is filed, the EPA may issue or deny the permit.

This section of the regulations provides a re-opener for citizen objections which must be filed within 60 days after EPA’s review period. There are limits as to

what are considered valid objections and in general, objections should be made during the public comments period. If EPA objects to a permit action as a result of a citizen petition, the cabinet will not issue the permit until the EPA objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the forty-five (45) day review period and prior to the EPA objection.

If the Cabinet issues a permit or permit revision prior to receipt of an EPA objection the EPA may modify, terminate, or revoke the permit consistent with the procedures in 40 CFR 70.7(g)(4) and (5). The cabinet will then issue a revised permit that satisfies the EPA objection; and the source will not be in violation for failing to submit a complete and timely application.

3.0 FEDERAL PERMITS AND APPROVALS

The approval of any federal permit requires federal action and therefore triggers a National Environmental Policy Act (NEPA) review. NEPA requires all federal departments and agencies to assess, as an integral part of their decision making process, the potential environmental impacts of their actions prior to the initiation of any action (National Environmental Policy Act of 1969).

A federal permit or approval issued by either the Federal Energy Regulatory Commission (FERC) or the Corps of Engineers (Corps) is considered a federal action which triggers the NEPA process.

An Environmental Assessment (EA) is typically where the NEPA process begins. It is a study that takes into consideration the geographic, social, and environmental aspects of the project, as well as the projects impact on historical, cultural, parks, wetlands, and ecological areas. Both short-term and long-term impacts must be considered. When economic or social effects are interrelated with effects on the natural or physical environments, then such effects must also be considered (40 C.F.R. §1508.14).

An EA must explain the need for the proposed project, the alternatives considered, and the environmental impacts of each alternative. It must also identify agencies and persons consulted in preparing the EA.

If the effects are not significant, then a Finding of No Significant Impact (FONSI) can be issued and the project proceeds with no further NEPA review. If a significant effect is identified, an Environmental Impact Statement (EIS) is needed unless the project can be revised to avoid any significant impact.

The FONSI demonstrates that the impacts of the project do not rise to the level of significance. The final FONSI document will include:

- Either the whole EA or a summary;

- References to any other pertinent environmental documents;
- Statement explaining the basis for a conclusion of no significant impact;
- Explanation if some factors were weighted more heavily than others;

The FONSI is made available to the public, but may or may not be put out for formal public review.

Any project on which an EIS will be prepared is subject to additional public involvement. Before an EIS is prepared, the agency publishes a "notice of intent" (NOI) in the Federal Register, and usually notifies potentially concerned parties by letter, or newspaper article, etc. The agency then carries out "scoping", which determines the scope of the analytic work that will create the EIS and substantive issues are identified for further study. The NEPA scoping process begins with the publication of a Notice of Intent to prepare an EIS and often involves face-to-face participation of the interested public.

The draft EIS (DEIS) is made available to the public with the purpose of soliciting comments not only on the DEIS but on the proposed project of federal action as well. Comments provided must be considered by the agency, and the agency's response must be documented in the Final EIS (FEIS).

The public may request a public hearing or the Corps decision maker may independently decide to hold a public hearing. Notice of the hearing may be incorporated into the notice of availability of the DEIS. The public is also informed of the decision maker's record of decision. Thus, a permit application requiring preparation of an EIS can involve five or more notices to the public during the review process.

An EIS must take into consideration a project’s various impacts, including those that affect unique characteristics of the geographic area such as "historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers,

and ecologically critical areas" (40 CFR 1508.27(b)(3)). It also can include impacts on "districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places" and on "significant scientific, cultural, or historical resources" (40 CFR 1508.27(b)(8)). Clearly, this process can potentially be very time consuming.

Once the EIS is drafted, it must be sent out for review to Federal agencies with "jurisdiction by law or special expertise with respect to any environmental impact involved and any appropriate Federal, State or local agency authorized to develop and enforce environmental standards". The Draft EIS (DEIS) is also made available for public review. Comments provided must be considered by the agency, and the agency's response must be documented in the Final EIS (FEIS).

3.1 Federal Energy Regulatory Commission

Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

The FERC is an independent federal agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build interstate natural gas pipelines. If the developer plans a coal gasification facility that has the potential to produce Synthetic Natural Gas (SNG) and transport the gas through a major interstate pipeline or a pipeline that will have an impact on the interstate transportation of gas, then a FERC certification for the construction of the pipeline will be needed.

The timeframes for issuance of a FERC certification are shown on Figure 5A, which details this permitting process as a stand-alone document and is located behind this section. The following web link is a guidance manual for stakeholder involvement in the FERC permitting process: FERC Guidance Document.

FERC approval for an interstate gas pipeline may have the longest timeframe compared to any other permit or approval for a gasification facility. FERC approval is a federal action. As a result, FERC approval will require a NEPA review for the gas pipeline right-of-way.

Under section 7 of the Natural Gas Act, the FERC reviews applications for the construction and operation of natural gas pipelines. In its application review, the FERC ensures that the applicant has certified that it will comply with Department of Transportation safety standards. The FERC has no jurisdiction over pipeline safety or security, but actively works with other agencies with safety and security responsibilities.

To meet the growing demand for natural gas, the FERC must continue to respond quickly when companies propose to expand and construct needed

pipelines and related facilities. The FERC has expedited the certification of natural gas pipelines by having FERC staff actively participate in projects that were using the pre-filing process to engage stakeholders in the identification and resolution of stakeholder concerns prior to the filing of a certificate application with the FERC.

The FERC will encourage and prefer the developer of the gas pipeline to use the NEPA pre-filing process, which identifies environmental issues before an EIS is prepared.

To begin the NEPA Pre-Filing review of a project the developer must submit a written request 7 to 8 months prior to filing an application to FERC, that:

- Explains why the developer wants to use the NEPA Pre-Filing Process, including timing considerations;
- Lists the Federal and state agencies in the project area with relevant permitting requirements, documents that those agencies are aware of the developer's intention to use the NEPA Pre-Filing Process and verifies that the Federal agencies agree to participate in this process;
- Identifies other interested persons and organizations who have been contacted about the project;
- Details what work has been done already, i.e., contacting landowners, agency consultations, project engineering, and route planning;
- States that the developer will provide third-party contractor options for staff to make a selection at the time after the NEPA Pre-Filing Process begins;
- Acknowledges that a complete Environmental Report and complete application are still required at the time of filing; and
- Details a Public Participation Plan which identifies specific tools and actions to facilitate stakeholder communications and public information, including establishing a single point of contact.

The pre-filing process is preferred by FERC and should be preferred by the developer as well. This process allows all parties to a FERC permit to identify and solve potential issues before a final FERC decision is made.

The draft EIS (DEIS), once completed, will be subject to public and agency review. Public comments are addressed, which may require further analysis. Then a Final EIS (FEIS) is prepared and published. The final EIS is considered in making the agency's decision about whether and how to proceed with the action that was the subject of the EIS. After the FEIS is received, FERC will approve or deny the FERC Order and implementation plan.

Once a FERC order is entered for the construction of a gas pipeline the developer will submit the order in the local Circuit Court of the development site. Condemnation, if necessary, and construction, can then begin.

3.2 Army Corps of Engineers

The Army Corps of Engineers (Corps) is responsible for regulating construction within navigable waters of the United States and discharges from dredge or fill activities within waters that drain into or are otherwise connected to navigable waters ("jurisdictional") of the United States, including special aquatic sites such as wetlands. A developer's planned site activities will likely include constructing a water intake in a water of the commonwealth, which will affect jurisdictional waters and therefore, the developer will be required to obtain authorization from the Corps (33 U.S.C. § 1344 (1972)) to conduct these activities.

There are two types of Corps permits described below, the Individual Permit (IP) and the Nationwide Permit (NWP) (33 U.S.C. § 1344 (1972)). The NWP is a general permit issued for similar activities that typically have temporary and relatively minor impact upon jurisdictional waters and the environment. One significant factor for determining whether an IP or NWP is the appropriate course of action for obtaining Corps authorization is the cumulative acreage and/or linear feet of jurisdictional waters that will be impacted by the construction of a coal gasification facility. The developer will need to determine the magnitude of jurisdictional water impact from the construction of a gasification facility.

The development of a gasification facility in Kentucky will be located within one of four Corps districts. These districts include: Louisville District, Huntington District, Nashville District, and Memphis District (See Corps Districts in Kentucky).

The timeframes for issuance of a Corps permit are shown on Figure 1, and Figure 5B details this permitting process as a stand-alone document.

3.2.1 Individual Corps Permit

The basic form of authorization used by Corps districts is the individual permit. Processing IPs involves the evaluation of individual, project specific applications in what can be considered three steps: pre-application consultation (for major

projects), formal project review, and decision making. Helpful information about the permitting process, including instructions for completing an application and a sample application can be accessed from Applicant Information or by using the attached information.

The pre-application consultation usually involves one or more meetings between an applicant, Corps district staff, interested resource agencies (Federal, state, or local), and sometimes the interested public. The basic purpose of these meetings is to provide for informal discussions about the pros and cons of a proposal before an applicant makes considerable commitments of resources. The process is designed to provide the applicant with an assessment of the viability of some of the more obvious alternatives available to accomplish the project purpose, to discuss measures for reducing the impacts of the project, and to inform the applicant of the factors the Corps must consider in its decision making process.

Within 15 days of receipt of an application (33 CFR Part 325) (See attached Corps Application), the district engineer is supposed to either determine that the application is complete and issue a public notice, or determine that it is incomplete and notify the applicant of information necessary for a complete application.

When a complete application is received, the Corps district will use a project manager system, where one individual is responsible for handling an application from receipt to final decision.

The project manager prepares a public notice, evaluates the impacts of the project and all comments received, negotiates necessary modifications of the project if required, and drafts or oversees drafting of appropriate documentation to support a recommended permit decision. The permit decision document includes a discussion of the environmental impacts of the project, the findings of the public interest review process.

A public notice will typically be issued within 15 calendar days of receipt of all required information following the completeness review (33 U.S.C. 1344; 33 U.S.C. 1413).

The comment period on the public notice will be a minimum of 15 calendar days and may be up to 30 calendar days if there are concerns raised by the Corps about the project (33 U.S.C. 1344; 33 U.S.C. 1413).

Based upon comments received, citizen concern or potential impacts, the district engineer will also evaluate the application to determine the need for a public hearing or extend the comment period. The Corps may require the developer to provide additional information to address or clarify public concerns (33 U.S.C. 1344; 33 U.S.C. 1413).

No permit is granted if the proposal is found to be contrary to the public interest. Public involvement plays a central role in the Corps' administration of its regulatory program. The major tools used to interact with the public are the public notice and public hearing. Public notices on proposed projects always contain a statement that anyone commenting may request a public hearing. Public hearings are also held if comments raise substantial issues which cannot be resolved informally and the Corps decision maker determines that information from such a hearing is needed to make a decision.

There are a series of external safeguards which work to maintain objectivity. One is EPA's Section 404 or so called "veto" authority. EPA may prohibit or withdraw the specifications of any disposal site if the EPA Administrator determines that discharges into the site will have unacceptable adverse effects on municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational areas. This authority also carries with it the requirement for notice and opportunity for public hearing. EPA may invoke this authority at any time (33 U.S.C. 1344; 33 U.S.C. 1413).

Individual state permitting and water quality certification requirements provide an additional form of objective safeguard to the Corps regulatory program. Section 401 of the Clean Water Act requires state certification (See water certification section) or waiver of certification prior to issuance of a Section 404 permit.

In addition to these requirements, the Corps' implementing regulations require that the district engineers conduct additional evaluations on applications with potential for having an effect on a variety of special interests (e.g., Indian reservation lands, historic properties, endangered species, and wild and scenic rivers).

Although the Corps states that, on average, individual permit decisions should be made within two to three months from receipt of a complete application, staffing issues and permit application backlogs may significantly increase the time for a permit review. Applications requiring an EIS average approximately three years to process.

3.2.2 Corps Nationwide Permits

Nationwide Permits (NWPs) are types of general permits issued by the Corps that are designed to authorize certain activities that have minimal adverse effects on the aquatic environment and generally comply with the related laws cited in 33 C.F.R. 320.3. Activities that result in more than minimal adverse effects on the aquatic environment, individually or cumulatively, can not be authorized by NWPs. NWPs do not require public notice, since public comment was solicited prior to authorization of the NWPs. However, to qualify for coverage under a NWP, the applicant must meet all general conditions for NWPs and any conditions specific to the NWP authorizing the proposed activity. Authorization of an activity under an NWP may be publicly challenged and delayed or may result in the applicant having to pursue an individual permit. The district engineer also has the discretionary authority to require an individual permit if it is believed the project may significantly affect environmental and/or navigable resources. 2007

Nationwide Permits provides an explanation of the NWPs, general conditions and the specific conditions applicable to each.

The development of a gasification project will likely require an individual permit from the Corps. However, if the project is eligible to use NWP, then the facility must complete and adhere to the requirements of the appropriate specific NWP permits. There are 44 different specific NWP's. It is likely that if a developer is eligible to use NWP, then it will complete one of the following:

- NWP 7 – Outfall Structures and Associated Intake Structures
- NWP 13 – Bank Stabilization
- NWP 25 – Structural Discharges

The facility cannot complete a separate specific NWP for each construction activity of a gasification facility. If the total disturbed area exceeds more than ½ acre, then an individual permit is necessary.

If the project is eligible to use the NWP, the developer must submit a pre-construction notification (PCN) to the district engineer prior to commencing the activity (NWP General Condition 27).

The PCN must be in writing and include the following important aspects:

- A description of the direct and indirect adverse environmental effects the project would cause; and
- A delineation of special aquatic sites and other waters of the United States on the project site

The facility may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation.

The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required of the general conditions. A letter containing the required information may also be used.

The district engineer must determine PCN completeness within 30 calendar days of receipt. The engineer may request additional information for completeness and will not initiate review until deemed complete. The engineer may request modifications or impose special conditions to mitigate any anticipated environmental impacts and avoid the need for an individual permit (33 C.F.R. 323).

If the facility is required to submit a mitigation plan, it must be reviewed and approved by the Corps as part of the PCN completeness review. There is no specified review and approval time, but this can take an additional 90 – 180 calendar days and the PCN is not deemed complete until the mitigation plan is approved (33 C.F.R. 323).

The facility can not initiate construction until notified in writing by the district engineer that the activity may proceed under the NWP (with any special conditions imposed); or 45 calendar days have passed since the PCN has been deemed complete and the Corps has not issued any written notice requiring an individual permit.

The 45 day period will not start until the delineation of the special aquatic sites and other waters has been submitted to or completed by the Corps.

4.0 MISCELLANEOUS

4.1 Emergency Planning and Community Right-to-Know Act (EPCRA)

The Emergency Planning and Community Right-to-Know Act (EPCRA) established requirements for Federal, state and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals (40 C.F.R. §116 (2006)).

A gasification facility may maintain Extremely Hazardous Substances (EHSs) on-site in quantities greater than corresponding Threshold Planning Quantities (TPQs) and must cooperate in emergency plan preparation (40 C.F.R. §116 (2006)).

According to EPCRA reporting requirements, the CTL/CTG facility will be required to report the storage, use and release of hazardous chemicals. The following link provides information relating to each potential requirement applicable to the facility. EPCRA information.

The local emergency planning committee facility must evaluate the need for resources necessary to develop, implement, and exercise the emergency plan, and make recommendations with respect to additional resources that may be required and the means for providing such additional resources.

4.2 Kentucky Office of Housing, Buildings and Construction

101 Sea Hero Road, Suite 100
Frankfort, KY 40601
502-573-0365, ext. 125

Building Permit - Office of Housing, Buildings and Construction

Prior to construction, the developer of a gasification project must interact with the Division of Building Code Enforcement of the Kentucky Office of Housing, Buildings and Construction (OHBC). Although the developer may also need to apply for local permits, the size and purpose of the facility will cause jurisdiction for plan review to fall to the state agency (Section 104.2 of the Kentucky Building Code) and therefore, construction may not begin until appropriate plan review and approval has been completed. Frequently asked questions about the permitting and plan review process are attached and can be accessed at Building Code Enforcement FAQs.

The plan review and associated inspections are initiated throughout the design and construction process by the use of the appropriate Plan Submittal Forms which can be found on the OHBC website at Plan Submittal Forms. All building permits must conform with the Kentucky Building Code which can be found at the following link: KY Building Code or by contacting the OHBC.

To obtain a building permit, the developer must first file an application (see attached plan form or Building Form) to the Kentucky Office of Housing, Buildings and Construction. The application must identify and describe the work to be covered by the permit for which application is made, and describe the land on which the proposed work is to be done. The description of the land may be a legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.

The Kentucky Building Plan Review Fee Worksheet is also attached and must be used to determine the proper review fee or follow the link at: Fee Worksheet. The developer must determine the number and size of the buildings that will be associated with the gasification facility. The fee sheet must be filed with the application and fees paid before construction can begin.

Applications for new buildings or additions must be accompanied by a copy of the current site survey by a Kentucky Registered Land Surveyor, although the code official has the discretion to accept other proof of location (Ky. Bldg. Code 105.3 (2007)). Indicate the use and occupancy for which the proposed work is intended and be accompanied by construction documents Ky. Bldg. Code 105.3 (2007)).

The review process of the submitted application is simple. The application and associated plans and information are examined for compliance with the Kentucky Building Code within a "reasonable time" after filing. The application will be rejected if the plans and construction documents do not conform to the requirements of pertinent laws. If the building official is satisfied that the proposed work conforms to the requirements of this code and laws and ordinances, then a permit will be issued. (Ky. Bldg. Code 105.3.1 (2007)) If there is a local building permitting agency, the letter from the OHBC will not suffice as a building permit. Rather, the local agency will issue a permit after receipt of the approval letter from OHBC.

An application must be approved within 180 days, or actively addressed by the applicant in that time or it will be considered abandoned. If questions or deficiencies are being addressed, the OHBC may grant extensions of time to avoid a finding of abandonment. (Ky. Bldg. Code 105.3.2 (2007)).

Every building permit issued will become invalid unless the work on the site authorized by the permit is commenced within 180 days after its issuance (Ky. Bldg. Code 105.5 (2007)).

License to Install Tanks - Hazardous Materials Section

In addition to responding to emergency situations, conducting safety training courses and inspecting facilities, the Hazardous Materials Section of the Kentucky Office of Housing, Buildings and Construction issues licenses for the installation of both above ground storage tanks and underground storage tanks and permits for the placement of the tanks. The developer of a CTL/CTG facility will construct and operate large tank systems. Permit application forms to install above ground tanks are attached or can be found at the following link Hazardous Materials Forms. "Frequently Asked Questions" related to the permitting of a tank system are attached.

Safety Inspections - State Fire Marshall

Div. of Fire Prevention
Dave Manley, Fire Marshal
1047 US 127 S.
Frankfort, KY 40601
502-564-3626

The Division of Fire Prevention, Office of State Fire Marshal, enforces various codes to ensure that all public structures, facilities, and regulated vehicles are maintained in such a manner that all occupants and users of these facilities will be protected from fire, explosion, or other similar hazards.

The office of the State Fire Marshall will perform a safety evaluation of all the gasification facility structures after construction to help identify problems and possible solutions to prevent any incidents.

5.0 ELECTRIC SERVICE REQUIREMENTS

5.1 Electric Utility Approval

A gasification facility will need substantial power supply in order to begin operations. After initial startup, the facility is expected to generate excess power beyond its own needs. Coordination with the local electric utility is required to: initiate studies and planning to upgrade or place new electric lines; to ensure adequate power is available for start up; and determine an adequate pathway to upload excess power.

The facility and the local electric utility will enter into an agreement that outlines the scope of the project. The agreement for the study will establish objectives, project scope, budget, roles, systems, and timing. It also helps the parties establish the procedures they will use to work together. The local electric utility will require a specific engineering feasibility study to be conducted for the gasification project.

The engineering study completed by the electric utility engineers for a gasification project will cost approximately $10,000 and take 60 days to complete. The utility typically bases its estimates on the amount of engineering hours estimated to complete the study. If the study takes less time than projected, the remaining balance would be refunded to the developer. The cost of the engineering study will likely be applied to the project as long as the customer completes the proposed project.

The timeframes for approval of an electric utility study are shown on Figure 1, and Figure 6A details this approval process as a stand-alone document and is located behind this section.

Following the conclusion of the study, the assessment of whether and how the electric utility can provide appropriate levels of electrical service will be used to develop a work plan to add or alter right-of-way, transmission lines and substations

needed to be developed to complete the project. Due to the fluctuating price and availability of steel, the electric utility may need an extended time to construct any necessary infrastructure for the project.

5.2 Regional Transmission Organization (RTO) Approval

PJM Interconnection
955 Jefferson Avenue
Valley Forge Corporate Center
Norristown, PA 19403-2497
Phone: 610-666-8980

Southwest Power Pool
415 North McKinley, #140 Plaza West
Little Rock, AR 72205
Phone: (501) 614-3200

If a facility generates excess electricity beyond its own needs, it will need to sell that power and upload it to the transmission grid. In order to accomplish that, there must be capacity in the transmission system and the facility will have to work with the RTO or ITO.

The regional RTO for all the sites is PJM. As explained in previous sections, SWPP is an RTO but through a private agreement with E.ON U.S., SWPP is responsible for administering and coordinating the sale of electricity on their behalf and is listed as an ITO. If a facility were to transmit excess generated electricity through a E.ON U.S. line, then SWPP will need to be contacted.

No matter which electric utility will receive the excess electricity generated, an interconnection study from PJM or SWPP will be required. PJM and SWPP are RTO's and they conduct their core business the same, but they are private and independent businesses and there are small differences between them.

One of the core functions of PJM and SWPP is planning for interconnection to ensure electric supply adequacy. If a facility intends to place excess power into the grid, a PJM or SWPP study will be required. The following sections explain the PJM and SWPP interconnection study process.

An RTO interconnection study is made up of a feasibility phase, system impact phase, and facility phase. The scope of the study will be driven by the projected level of power expected to be available. If less than 20 megawatts (MW) is sold on the

open market, only certain sections of the RTO interconnection study must be performed.

The facility must submit a completed Interconnection Request and an executed Feasibility Study Agreement. The submittal of all required data must be accompanied by a $10,000 study fee. The $10,000 study fee can be waived for generator requests under 20 MW in size. Overlap can be expected in the feasibility and system impact studies.

Typically, a scoping meeting will be held to discuss the interconnection request and review relevant existing studies. At this point the parties will determine if the study will include a feasibility study or proceed directly to a system impact study, facility study, or an interconnection agreement.

To initiate the interconnection planning process, a developer must contact the appropriate RTO. Once a project is initiated, the RTO will assign a Project Manager for each phase of the interconnection process. The Project Manager will be responsible for working with the developer and its respective staff to complete the necessary steps for that particular project phase.

An assigned client specific manager will guide each developer through a specific set of procedures to identify transmission expansion assignment costs. In the event of geographically clustered project applications, each application is evaluated and is given project-specific system enhancements.

An Interconnection Feasibility Study Agreement will specify that the developer is responsible for the actual cost of the Feasibility Study. Within five business days following a scoping meeting, the developer will specify points of interconnection and any reasonable alternative points. Within five business days following the utility's receipt, the utility will tender to the developer the Feasibility Study Agreement signed by the utility, which includes a good faith estimate of the cost

for completing the Feasibility Study. The developer will then execute and deliver to the utility the Feasibility Study Agreement along with a $10,000 deposit no later than thirty calendar days after its receipt.

Unless otherwise agreed, simultaneously with the delivery of the Interconnection Feasibility Study to the developer, the utility will provide an Interconnection System Impact Study Agreement. The Interconnection System Impact Study Agreement will provide that the developer will compensate the utility for the actual cost of the Interconnection System Impact Study. Within three business days following the Interconnection Feasibility Study results meeting, the utility will provide to the developer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection System Impact Study. The developer will then execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the utility no later than thirty calendar days after its receipt along with demonstration of site ownership, and a $50,000 deposit.

Simultaneously with the delivery of the Interconnection System Impact Study to the developer, the utility will provide an Interconnection Facilities Study Agreement. The Interconnection Facilities Study Agreement will provide that the developer will compensate the utility for the actual cost of the Interconnection Facilities Study. Within three business days following the Interconnection System Impact Study results meeting, the utility will provide to the developer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection Facilities Study. The developer will execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the utility within thirty calendar days after its receipt, together with the required technical data and the greater of $100,000 or the developer's portion of the estimated monthly cost of conducting the Interconnection Facilities Study.

If the developer plans a gasification project in AEP or EKPC territory, then PJM membership is not required for the initial planning and construction phases of a generation or merchant transmission interconnection project, but membership will be required prior to commercial operation. In many cases, membership will be required in order to integrate operational and market infrastructure with PJM. PJM membership entails certain data requirements, operational and market coordination, committee support and financial obligations. Membership requires an initial $1,500 fee and an annual $5,000 fee to retain membership.

If the developer plans a gasification project with KU lines, the developer will go through a similar procedure if excess generated electricity is placed on the KU lines.

SWPP, as an RTO created in compliance with FERC Order No. 2000, will require the same feasibility, system impact, and facility studies and approximate costs as for PJM, however, certain differences between the RTOs should be noted.

Unlike PJM, SWPP does not charge a membership fee for interconnection to the power system. Similarly, KU contracts with SWPP to oversee all their transmission services whereas AEP only interacts with PJM when co-generation is involved. And perhaps most importantly, SWPP does not accept application requests on a two-time a year cycle like PJM.

ID numbers 46 – 56 of the Gantt chart detail the timeframes for the RTO study. The following web link provides access to a series of guidance manuals for the RTO process. PJM Manuals

5.3 Kentucky Generation and Transmission Electric Siting Board Approval

Public Service Commission
KY Transmission Siting Board
P.O. Box 615, 211 Sower Boulevard, Frankfort, Kentucky 40602-0615
Phone (502) 564-3940

The seven-member Siting Board within the PSC reviews applications for the construction of merchant power plants with a generating capacity of 10 megawatts or more and transmission lines capable of carrying 69kV or more (KRS 278.700 et seq.). A gasification facility is expected to generate excess power and may need to construct transmission lines with a capacity which exceeds 69kV.

Statutes governing the PSC dictate that construction of a transmission line less than 1 mile in length and carrying less than 138kV are considered an ordinary extension of existing services and therefore not subject to PSC jurisdiction (807 KAR 5:120 (2005)). The Siting Board may be involved if new transmission lines capable of carrying 69kV or greater are required but fall outside the PSC jurisdiction by carrying less than 138kV and having a length of less than a mile. If the line falls under PSC jurisdiction, the developer will need to coordinate and support the local electric utility in the request for approval of the extension of transmission lines.

The timeframes for the approval of the Siting Board are shown on Figure 1, and Figure 6C details this permitting process as a stand-alone document and is located behind this section. The following web link provides a guidance manual for the Siting Board approval procedures: Siting Board Procedures.

An applicant planning to apply for certification from the Siting Board must submit a Notice of Intent at least 30 days prior to submitting the application (See attached Notice of Intent or NOI) (807 KAR 5:110 (2005)). The notice, which is made public, must include the identity of the applicant, a brief description of the proposed facility and its location, the address of the local planning and zoning commission, if any, and a description of set backs. The 30 day period is used by the Siting Board to appoint

appropriate ad hoc members and obtain the services of any consultants it may need for the application review.

An application for a certificate from the Siting Board is filed following the 30 days required for the NOI. The application must contain certain information, including evidence that public notice of the application has been made, a report on public involvement activities conducted by the applicant, a site assessment report containing a detailed description of the project and thorough analysis of the impacts to be considered by the Siting Board (visual impacts, traffic, property values, etc), a statement of compliance with any local zoning regulations and noise control ordinances, an analysis of the effects of the proposed facility on the electric transmission grid and an analysis of the economic impacts of the proposed facility.

Within 30 days of the application filing, the Board can set an evidentiary hearing at which expert witness may be asked to testify. The Board may also convene a public hearing, and usually does. The applicant is required to provide proof of notice given to each party and the general public at least 5 days prior to each hearing.

807 KAR 5:110 establishes the application fees which will apply for any procedure before the Siting Board. The fee is established as a function of the length of the line and the amount of capacity it will carry. The formula applied is $50 per kilovolt of rated capacity, per mile of length but will not be less than $10,000 or more than $200,000.